## Measurement of the average multiplicity of prompt-fission-neutrons from $^{238}U(n,F)$ and $^{235}U(n,F)$ from 0.7 to 200 MeV

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The experiments were carried out at the Los Alamos Neutron Science Center with the FIGARO setup installed on WNR, a "white" spallation neutron source. Fission Neutron Spectra were measured with a fission chamber (target) and liquid scintillators (fast neutron detectors with a lower threshold of 0.65 MeV and an upper threshold of 7.5 MeV). A refined analysis of the recently published FNS [1], was performed to extract the relative prompt-fission-neutron average multiplicity (nubar). The results, normalized to Frehaut data [2] at low energy, compare well to reference data up to 28 MeV and a recent evaluation performed at Bruyeres-le-Chatel. We will discuss the shape and the anisotropy of nubar - as measured at side angles and energy cuts - at higher energy.

- [1] Th. Ethvignot et al., Physics Letters B, Volume 575, Issues 3-4, 27 November 2003, Pages 221-228
  - [2] J. Frehaut, private communication, EXFOR data (1976).

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